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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,535	02/06/2004	Eugene Matzan		5402

7590 06/22/2005  
UPSTATE CTC  
63 WINDING CREEK LANE  
ROCHESTER, NY 14625

EXAMINER

JULES, FRANTZ F

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 06/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/772,535

Applicant(s)

MATZAN, EUGENE

Examiner

Frantz F. Jules

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 15-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In the instant case the recitation of means responsive to outputs from the sensors for generating and storing electrical energy or the output of the generating electrical energy have not been described in the specification with enough detail to allow an ordinarily skilled artisan to duplicate the invention.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Maine (US 4,936,529).

Art Unit: 3617

Unbehaun discloses a system for detection of railroad wheel defects comprising remote rail defect monitors (32) installed in rails over which the wheels travel, and means (23) obtaining wheel identification and defect information from the monitors.

said central monitoring station has means which receive the information from said remote rail defect monitors and generates reports and warnings related to the condition of said wheels as the controller activates an alarm at a remote location when a voltage is detected.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-3, 7-12, 14, 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maine in view of Main et al (US 6,523,411) and Hallberg (US 4,702,104).

Claims 2-3, 7-9, 14, 17-19

Maine teaches all the limitations of claims 2-3, 7-9, 14, 17-19 except for a system comprising a plurality of acoustical vibration sensors for each rail including means to amplify electrical signals generated by said sensors and comparing the signals to stored data. The general concept of providing an acoustical vibration sensor for each of the rails is well known in the art as illustrated by Mian et al which discloses the teaching of a

Art Unit: 3617

plurality of acoustical sensors (16, 38) in a system for detecting wheel defect. Also, the general concept of providing means to amplify electrical signals generated by sensors and comparing the signals to stored data is well known in the art as illustrated by Hallberg which discloses the teaching of means (7) to amplify electrical signals generated by sensors and comparing the signals to stored data, see col 2, lines 3-52, col. 4, lines 29-32. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Maine to include the use of an acoustical vibration sensor for each of the rails in his advantageous system for detecting wheel defect in order to reduce or eliminate the number of false positives noise in the system thereby improving the longevity, accuracy, reliability, quickness, cost-effectiveness in the system as discloses in col 1, lines 56-59. Also, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Maine to include the use of means to amplify electrical signals generated by the sensors and comparing the signals to stored data in his advantageous system in order to reliably detect the presence of defective wheels in a passive railroad vehicle, see col 1, lines 40-41.

#### Claims 10-13

Regarding using strain gauge sensors, or pressure, or magnetic sensors or a counter for counting the number of wheels as recited in claims 10-13, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Maine to include the use of strain gauge sensors, or pressure, or magnetic sensors or a counter for counting the number of wheels in his advantageous system, as sensor selection is a common and everyday occurrence throughout the system for detection of railroad wheel

Art Unit: 3617

design art and the specific use of strain gauge sensors, or pressure, or magnetic sensors or a counter for counting the number of wheels would have been an obvious matter of design preference depending upon such factors as the weight of the object to be carried by the rails and sensor, the yield strength of the side rail and sensor; the ordinarily skilled artisan choosing the best stress profile corresponding to a particular loading imposed on the rails and sensor which would most optimize the cost and performance of the device for a particular application at hand, based upon the above noted common design criteria.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Moufle et al and Bambara are cited to show related apparatus for the detection of defects using accoustic signals.

Drake is cited to show related method of detecting flaw in a wheel and identify a wheel.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz F. Jules whose telephone number is (703) 272-6681. The examiner can normally be reached on Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph S. Morano can be reached on (703) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frantz F. Jules  
Primary Examiner  
Art Unit 3617

FFJ

June 17, 2005

**FRANTZ F. JULES**  
**PRIMARY EXAMINER**

A handwritten signature in black ink, appearing to read 'Frantz F. Jules', written over a horizontal line.